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Commemorating
25 Years
of

*Consumers' Co-operative Refineries
Limited*

REGINA, SASKATCHEWAN

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ALL stately towers break the prairie skyline on the north-east outskirts of Regina—towers that stand in a rigid salute to the people of the great Western Plains, symbolizing their courage and vision, and their faith in themselves and in each other. Beneath these towers, pulsing machines are at work; machines that echo the heartbeats of prairie people and grow louder and louder with the rising tempo of their spirit of togetherness.

It is in tribute to these people that this booklet, with its story of their dynamic accomplishments, is written. And it is with pride and humility that we gratefully acknowledge the work of the early pioneers of co-operative effort on the Prairies. To their bold and courageous determination, the people of the Prairies owe much.



The Silver Era

This is more than a story of bricks, mortar and steel. It is more than a story of hydrocarbons being transformed in the crucible of the reaction chamber in the cracking process. It is essentially a story of men—and women, too, who have met the impact of a changing world and have shown an ability and a way to solve many of its major problems by working together in co-operative action.

It can be said that we live in a changing world. Perhaps there are some people who think of the "Industrial Revolution" as a chapter of a bygone age. But, in reality, the gasoline engine, the automobile, the farm tractor, and the combine are as much a part of the Industrial Revolution as the steam engine, the spinning jenny, and the spinning mule. Even within the past decade man's ingenuity and inventiveness has swept forward, creating a rising tide of changes in all industries, including agriculture.

In this year, A.D. 1960, the Industrial Revolution is still with us. Indeed, the scientific strides of recent years have already created images of more changes to come—changes that may cause the so-called "Industrial Revolution" of former years to appear as a mere prelude to the changes and the accomplishments of the future.

The first half of our present century has seen the almost complete mechanization of operations on prairie farms. The nineteenth century homesteaders of these prairie plains were pioneers in every sense of the word, for they literally carved a living—and a home—from the soil. Their stock-in-trade was courage, a strong back, a yoke of oxen or a team of mules. Fortunate, indeed, was the early homesteader who owned a team of horses as the "power plant" on his homestead.

With the turn of the century came the giant steam engines and a new power to break the virgin prairie land and operate threshing outfits. Changes continued to envelop the scene as the large steam engines slowly but surely gave way to adaptations of gasoline engines as the source of farm power. Then, in the early 20's, the general purpose farm tractor, as we know it today, began to emerge, and farm mechanization was on its way.

Through all this period of change, the farmer was not particularly conscious of economic forces beyond his line fence. The concentration of economic power did not appear to affect him personally, but was merely something to read about. Yet, a change of great significance had taken place, for the farmer was no longer the controller of his own costs because he raised his own animals and fodder. He was now dependent on the refiners and marketers of petroleum products to supply his power needs at costs which would enable him to economically place his farm products on the world's markets. True, the price of gasoline and other petroleum products always seemed high, but, it appeared these costs could be offset by a better price for grain and livestock.

The cure appeared to lie in higher prices for primary products rather than in lower production costs through decreases in the price of petroleum products. But, as events have since shown, high prices are an impediment to world markets, and the farmer must aim to lower costs of production.



The Co-op Refinery, taken from the air, looking east.



CONSUMERS' CO-OPERATIVE REFINERIES LTD. BOARD OF DIRECTORS
AND SENIOR STAFF, 1941

Back Row: FRANK BURTON, Vanguard, W. S. MAY, Weyburn, L. J. BRIGHT, Bulyea;
B. L. SEAMAN, Rouleau, O. B. MALES, Supt., W. T. MOONEY, Grand Coulee; J. B.
BRYSON, Tisdale, D. V. RUNKLE, Estlin.

Seated: McD. RANKIN, Grand Coulee; E. T. MOWBREY, Treasurer; H. L. FOWLER, Regina;
R. McKAY, Saskatoon; E. E. FRISK, Kronau; T. W. BARMBY, Regina; G. E. SMITH, Mds.
Mgr.: V. C. THOMAS, Milestone

Inset: G. BURDEN, Moosomin.



Signing the contract for the original cracking unit of Consumers' Co-operative
Refineries Limited, Regina, September 28, 1939.

Seated (left to right)—R. E. Nogel, W. McCreary, O. B. Moles, E. E. Frisk, H. L.
Fowler, Dr. Sidney Barr, N. W. Kerr, O.C., G. H. Barr, O.C.

Standing (left to right) W. H. Johnstone, C. O. Smith, George Burden, V. C. Thomas.

The Lesson of the THIRTIES

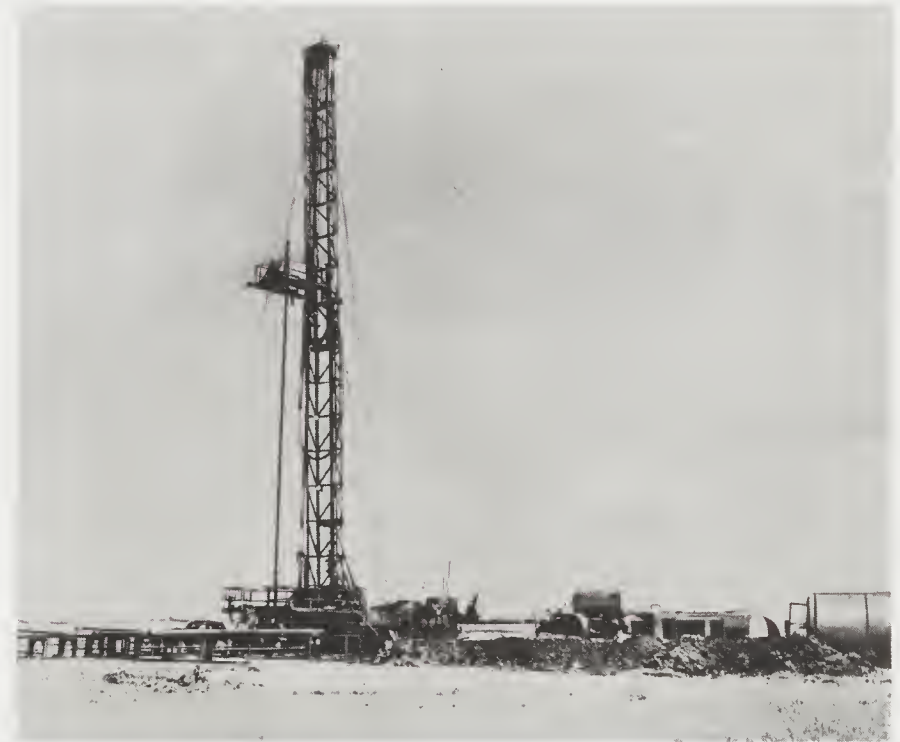
The collapse of world finance in 1929, accompanied by drought, insect plagues, etc., resulted in untold hardships on the prairies. It brought a realization that, to even make a bare living, production costs on the farm must be drastically lowered. Farmers saw that for the sake of mere survival they must resort to their former position wherein the costs of farm power lay within their own control. In the hard years of 1931 and 1932, many meetings—largely sponsored by municipal councils—of tractor owners were held to discuss the petroleum price situation. As grain prices fell to an all-time low—as low as 32c a bushel—it was apparent that if farm operations were to continue, the price of petroleum products must be reduced.

Individually the farmers could do little. Collectively, it seemed, they might achieve their purpose. The way seemed to lie in co-operative action, and this soon followed, especially within the Regina-Moose Jaw-Soo Line area. In these years, co-operative associations were organized for the specific purpose of distributing petroleum products at Milestone, Wilcox, Regina (Sherwood), Moose Jaw, Riceton, Lewvan, Rouleau, Lang, Weyburn and Pense.

At this time, spreads between the wholesale and retail prices of farm fuels were quite wide—seven cents per gallon. So, all these associations, in their early days, were quite successful. Operating expenses were kept to a minimum and the savings, to farmer-

members, were substantial. In some cases patronage refunds as high as five cents per gallon were returned. Products were supplied by major oil companies, independent refineries at Moose Jaw, two refineries at Coutts, Alberta and certain refiners in the mid-west area of the United States.

As these ten petroleum co-operatives grew and prospered, their success made serious inroads in the gallonage formerly enjoyed by the major oil companies and some independents in the area. Retaliatory measures were not unexpected, but not even the most imaginative person could possibly envisage the ultimate results of those measures.



The Co-op Refinery searched for its own crude oil long before there were any major discoveries in Saskatchewan. The picture shows the first oil well on Co-op property at Smiley, Sask.



On the platform, standing, are some of the pioneer co-operators who served on the first Board of Directors. George Urwin, past president of F.C.L. (left of microphone) is introducing: T. W. Bormby, S. G. Gough, H. L. Fowler, first general manager; V. C. Thomas, Milestone; W. H. Johnstone; C. O. Smith; and E. E. Frisk.



August 18, 1954, was a big day for prairie co-operators! This was when the newly enlarged Co-op Refinery was dedicated.

Events Leading to Co-operative Action

Early in the 1930's, dumping duties were imposed on petroleum products imported from the U.S.A., thus entirely shutting out the inflow of petroleum products from across the border. At about the same time, the independent refineries at Moose Jaw and Coutts were purchased by major oil companies.

Almost coincidental with these events, the wholesale or tank car price of petroleum products to co-operatives and independent bulk stations was sharply increased. There was no general increase to the consuming public, since the oil industry had promised, to the government of that day, that if dumping duties were imposed there would be no increase to the consumer. There was, however, a definite increase in the wholesale price of petroleum products, and the impact of this increase was to render almost impotent the operations of co-operatives engaged in the distribution of petroleum to their members.

Here was a challenge! Such action could not be tolerated without a counter-action by co-operative members. The situation was carefully

studied. All angles were considered. A co-op refinery, it seemed, was the only answer. But, could such a refinery be built and operated by farmer co-operatives to meet the needs of their members? It hadn't been done before! Precedent was against it. Some, however, pointed out that the farmer, through organization and operation of the Wheat Pools, had become a definite factor in the marketing of farm products. If it could be done in wheat, why not in gasoline? *Why not build a co-op refinery?*

Further meetings were held in Regina and at other points during the winter of 1933-34. Committees were set up, and the whole matter carefully weighed. Finally, a decision was made. The co-operatives would build their own refinery—the first co-operative refinery in the world!

Incorporation was sought and secured in April, 1934. That summer was spent canvassing members throughout the whole area, and by fall, a total of \$32,000 cash had been subscribed and paid in. To some, this was an inadequate sum with which to proceed, and certainly it was far less than would be required to carry out the original plan of building a small cracking plant. Nevertheless, in the late fall of 1934, the Board of Directors decided to forge ahead and build the only kind and type of refinery the meagre resources would permit—a small 500-barrels-per-day skimming plant.

Technical men were engaged to draw up plans and designs, and management was hired. A suitable site was secured, and the contract was let. On May 27th, 1935, *the first co-operative refinery in the world went on stream. History was made!*

The Catalyst

Those who saw the first refined petroleum products flow from the Co-op Refinery scarcely realized that they were witnessing the birth of one of the most significant industrial developments in history. Agricultural producers—farmers—had extended their farm operations right back into the refining of petroleum products!

Oil had already played a dynamic part in world history. Scripture tells of the use of oil by the early Chaldeans. The renowned Queen Cleopatra of Egypt gave an oil lease to one courtier, who incurred her lasting displeasure by neglecting to pay the royalties due under the lease. Marco Polo speaks of the use of oil by Eastern peoples, and other historians hold that the North American Indians made use of oil seepages found in many areas of Canada and the United States. It remained, however, for the machine age to make im-

perative the "Age of Oil," and it remained for the Consumers' Co-operative Refineries to usher in the era of refining by the ultimate users of refined products.

But the birth of the Co-op Refinery was destined to have even more resounding effects, for it was soon apparent that Co-op Oil was the catalyst needed to bring a new burst of life to the consumer co-operative movement on the prairies. There was a tremendous upsurge in interest in consumer co-operatives—an upsurge that was given fresh impetus when, at the end of six months' operations, the new refinery showed a saving of \$28,205.70! People remembered that the total amount subscribed by the shareholders was only \$32,000, or slightly more than the savings created in the first six months of operation. The potentialities of co-operative refining and distribution were now clear, and even skeptics were convinced! Co-operators envisaged a newer, greater co-op refinery rising through the years. Farmer groups from other parts of Western Canada and the United States focused attention on the bold strategy of prairie co-operators, and came from near and far to obtain a first-hand knowledge of this "Co-op Adventure in Oil."



The world's first Co-op Refinery as it appeared in 1935—the little acorn from which today's mighty plant has grown!

The War Years

In 1939 came the outbreak of World War II. Wartime restrictions slowed expansion of the Co-op Refinery. But it did not dim hopes or planning for a great future!

If the original plans for the building of a small cracking plant met

disappointment because of meagre resources in 1935, the visions of the pioneers were not too long in reaching fulfillment. In 1939, plans for a larger, more efficient plant to be built in the future were drawn up, and in 1940, the first stages of realization of these plans was reached when a cracking unit was installed, increasing the capacity of the refinery to 1,500 barrels per day.

In 1942, with modest additions, the capacity of the plant was stepped up to 2,000 barrels per day. Sales for that year reached \$2,182,000 on which savings of \$258,000 were realized, bringing the total savings since the start of refining to well over one million dollars.

Even in those troublesome early days, it was recognized that to achieve a maximum benefit to consumers, co-operatives must find their own sources of crude oil. In the 1942 Annual Report, it was noted that over \$38,000 of the still meagre resources of the Refinery had been spent in a search for oil in Saskatchewan. These early wells were not successful, but nevertheless, it is interesting to note that co-operatives were engaged in drilling long before the discovery of crude resources in Saskatchewan.



The Co-op Refinery; a recent photo taken from the north-west.

First Amalgamation

Perhaps symbolically, on the very day on which Allied forces landed in Europe, "D" Day, June 6, 1944, delegates of the Saskatchewan Co-operative Wholesale Society and Consumers' Co-operative Refineries began meetings at which it was decided to unite the two organizations for a more effective co-operative endeavor. Thus, a new organization, Saskatchewan Federated Co-operatives was formed with the Co-op Refinery as a wholly-owned subsidiary. With this amalgamation came a realization that the Co-op Refinery was destined to serve an ever-widening number of people. Plans for future expansion were tackled with a renewed vigor so that building might proceed as quickly as possible at the end of hostilities.

The 1950's

In August, 1951, a crowd of over 1,200 persons came from all corners of Saskatchewan to witness the ceremony in which the newly-enlarged Co-op Refinery was dedicated "to the glory of the pioneers who conceived it; to the men who had labored to produce it; and the men and women who use its facilities and its services." The plant now had a capacity of 6,500 barrels of crude per day. But even that was not enough to meet the rising tide of co-operative needs.

Only three years later, in August, 1954, a fully modern Catalytic Cracking Plant was erected at a cost of \$5,500,000. A throng,

doubling the crowd attending the 1951 ceremonies came to Regina to see, at first hand, the rededication of the World's First Co-op Refinery to the service of its members. "In the name, and on behalf of the many thousands of Saskatchewan co-operators who own this and other far-flung co-operative enterprises, I now perform the physical act which symbolizes the opening of this most modern Catalytic Cracking Plant. The world will little heed nor long remember what we say here, but it can never forget what has been done here," said H. L. Fowler, the first manager of the Co-op Refinery, in his dedication address.

There have been other significant events since 1954—events that may pass unnoticed in this ever-quickenning world. But they are events that tell of growth of the co-operative way, and change to meet new needs.

In January, 1955, delegates attending the annual meetings of both the Saskatchewan Federated Co-operatives and the Manitoba Co-operative Wholesale Society unanimously chose to unite their forces into one. Thus, Federated Co-operatives Limited, which now serves Saskatchewan, Manitoba and North-Western Ontario was born, and with it a new era in co-operative development and a larger demand for the products of the Co-op Refinery.

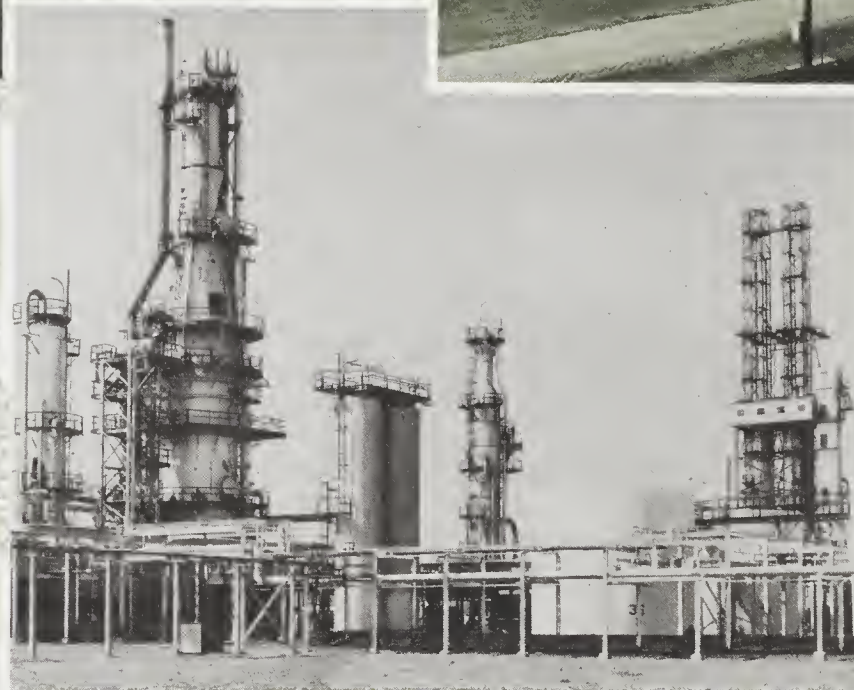
In October, 1958, a major step to adapt the Co-op Refinery to meet changing times and conditions was completed when a new unit to manufacture petroleum coke from crude oil residue was completed. As many former users of the end product, bunker fuel, changed over to newer forms of power, the disposal of bunker became an increasingly difficult problem. With the new unit, the former end products are converted into petroleum coke required in the process of refining metals, particularly aluminum. It may be of interest to note that the cost of this coke plant, \$1,400,000, is some 42 times the amount of the original capital investment in the Co-op Refinery!



The Administration Building (left) seems dwarfed by tall towers.



Looking south-west.



The catalytic cracking plant (left), added in 1954, and the coke manufacturing plant (right), erected in 1958.



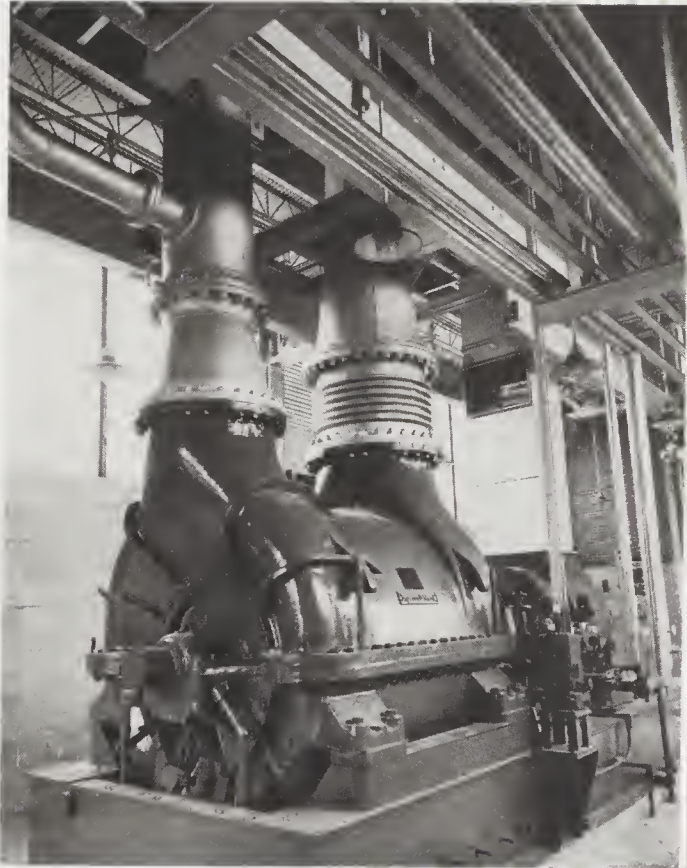
Looking west from near the control room (foreground)



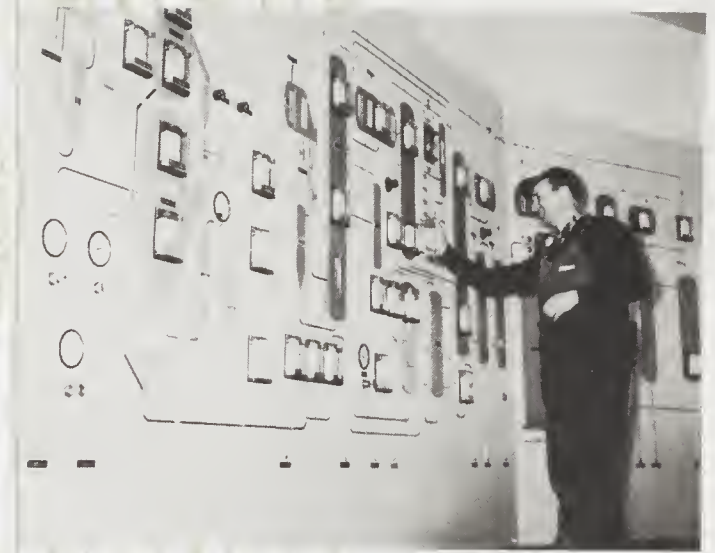
Looking west from the coke plant towers.



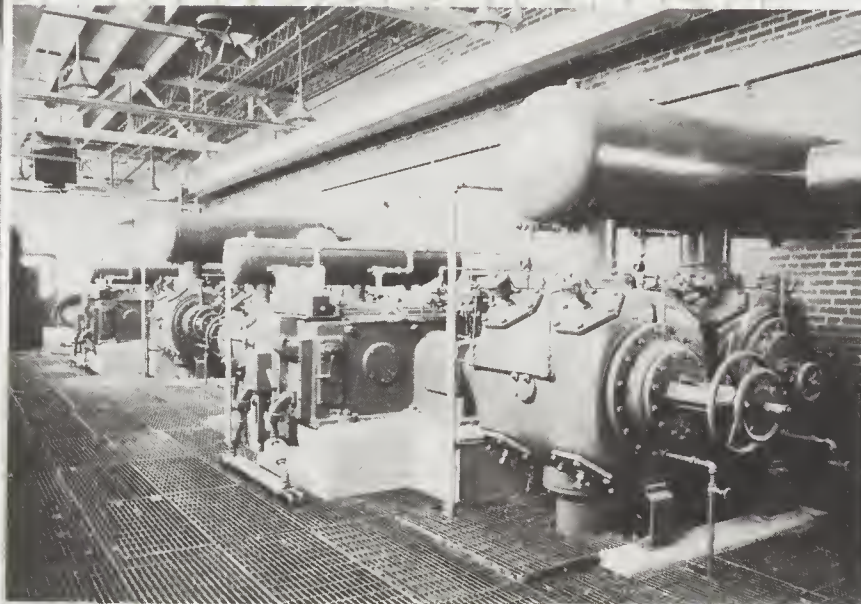
*Looking westwards, the Refinery is a scene of tall towers,
steel structures, and many miles of pipes.*



This giant air blower cost more than the original Refinery of 1935.



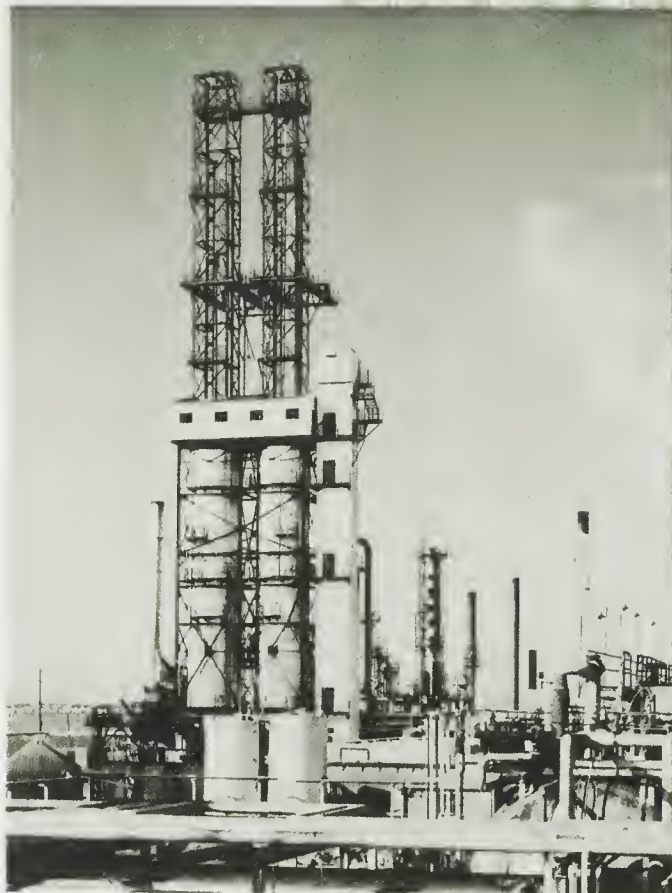
The nerve centre of the Co-op Refinery where automatic controls govern the refining processes.



Massive machines are required for compressing, pumping and cooling.

Looking northward, the towers of the coke plant seem to dwarf the crude oil distillation towers.

The towers of the coke manufacturing plant stand more than 200 feet above the ground.



A conveyor system loads open cars with petroleum coke.

Into the GOLDEN ERA

In this year, A.D. 1960, upon the conclusion of the first twenty-five years of the Co-op Refinery history and the occasion of the Silver Anniversary, our minds flash back through the years to the courageous founders of 1934-35. Then, inevitably, our thoughts must turn toward the future, to the next twenty-five years and the Golden Anniversary—across a span of time where opportunities to write even more glorious pages of co-operative history beckon to us. For the great adventure, begun by the pioneers of the past, has not ended.

Fifty years ago there was little need for a co-operative refinery. But, the changes and advancements of twenty-five years ago had brought about a need. Now, in 1960, advances in science and technology have made commonplace inventions and an ability to produce goods in an abundance that was seldom dreamed of fifty years ago. At the turn of the last century, who would have thought of atomic power, television, automation? Who would have dreamed that within six decades man would be upon the verge of exploring space?

Yet, all this has come to pass. Man is now producing goods unknown in yesteryear, and is capable of producing his needs in an abundance that taxes the imagination. Today there is little difficulty in

producing goods; the problem is distribution so that all may enjoy a greater share of the fruits of man's ingenuity.

If, in 1935, co-operative action led to a solution of a problem in a small corner of the world, surely in 1960 when the co-operative ranks have swelled from a hardy few to many thousands, there is a power and ability to move on to even greater achievements! The co-operative method has been tested and proven. It needs only the will of its 1960 disciples to carry it on to much greater accomplishments.

Within our own perimeters there are unsolved problems. Beyond, there are men and women who have not known the abundance or freedom from want that is a part of our way of life. Although production of food and goods to meet all needs is even now possible, the problems of distribution to all men and all nations remain unsolved. While the scientific and technological progress of the past quarter century has been phenomenal and has brought many changes to our way of life, it is apparent that a change in the business system and distribution must be made if the entire world is to share the new abundance. Until men are freed from want, the world will not be free from fear.

The road ahead is challenging, but its waysigns have already been written. When the pioneers of the thirties started the Co-op Refinery, they planted a tree that has grown many fruits, for from the success of the Refinery has come the means by which many other co-operative ventures were started. And each of these has, in turn, provided further benefits for the people of the prairies.

The task that lies before us calls for an even greater stress upon the co-operative way to meet the new problems within our own realm and to lead the way in solving those beyond. It is a task that has already been undertaken, for even now men are painstakingly working over drawing boards to lay plans for new additions to the Co-op Refineries which will cost millions of dollars to project into

reality—additions that will further modernize the Refinery and enhance the opportunities it provides for the future.

Accountants have calculated that over eighteen million dollars in savings have been returned from the Refinery to its owners, a figure that does not adequately portray the real savings for it cannot include the unknown savings resulting from the lower prices undoubtedly enjoyed because the Co-op Refinery exists. Nevertheless, that is a notable achievement for it was accomplished from a mere idea that was born and grew in the face of adversity.

But perhaps the greatest of all achievements of the past twenty-five years is the fact that a small group of co-operative disciples began with only an idea and carried it through to fruition, teaching thousands upon thousands of people that by working together they can do great things for themselves and for their fellow men. The pioneers have laid a firm foundation and shown the way. Now their method, its proof, and the fruits of their labors have become a heritage for younger men.

As modern scientific and technological advances, and tendencies toward "bigness" in business dovetail control into fewer hands while often ignoring the want and need of many people throughout the world, there is a great hope and need for co-operative action.

As the problems which prevail among men and nations are created by men, so men, by working together through the co-operative way can solve them. The greatest need that faces us today is to recognize the problems that confront us and resolve to work together to solve them.

We have been shown the way. We are many thousands strong in our own realm. And we are not alone, for co-operation has become a hope and method of people the world over. Our task, on the threshold of our Golden Era, is to work together with all the force of our united strength of will and desire for a new and better freedom from want and fear for all men. This is the challenge and the opportunity of the next twenty-five years that beckons us each and every one.

In this present day world the good and welfare of all members of mankind are so closely linked that all must work together in order to adequately solve the common problems of humanity. Through the use of co-operative techniques, men and women everywhere can so direct and control their social and economic affairs as to assure for themselves and others a world order based on Peace, Prosperity and Progress. In the universal crusade for that better world, we must aim and plan to play a role worthy of our Pioneers, ourselves, and our children.



Canning oil in the Oil and Grease Warehouse.



Up to 12 tank trucks can be loaded at once with the pumps that are capable of dispensing as much as 1,200 gallons of products per minute.

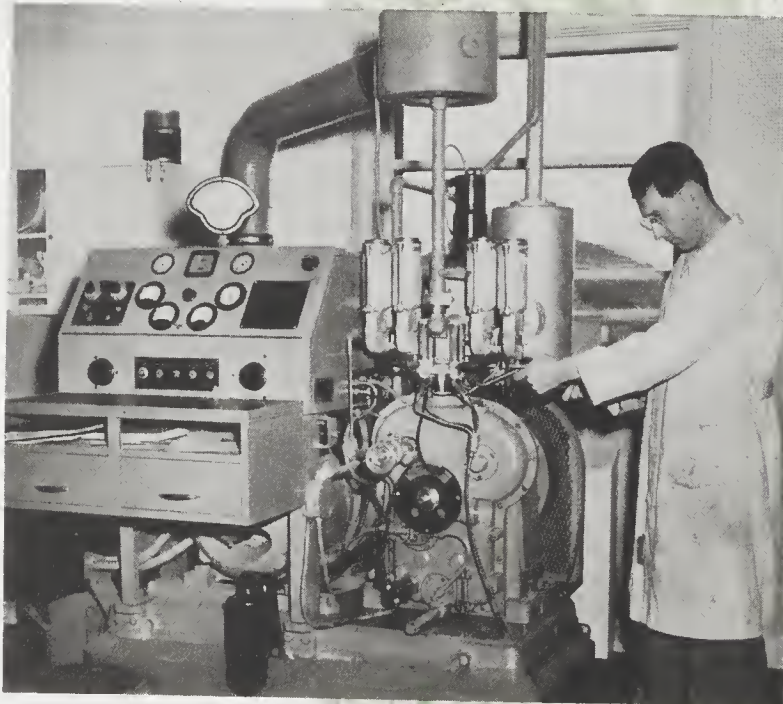
CO-OP OIL and GREASE is taken away from the warehouse by the truckload. Inside the warehouse are storage tanks to hold over 260,000 gallons of oil, a shop for repairing and reconditioning drums, and ample facilities for canning oils and packing grease.





The owners of the Co-op Refinery are co-op members, near and far away, who use its products.

Tetra-Ethyl lead, used to increase octane ratings of gasolines is brought in by tank car.



Laboratory Technician testing octane rating of Co-op gasolines.

FEDERATED CO-OPERATIVES LIMITED

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Refinery Manager: B. W. PAWSON

Business Manager: R. G. TUBMAN

Senior Refinery Engineer: B. F. DAHLSTROM

Senior Plant Engineer: K. J. MacRAE

Process Superintendent: S. C. McCLELLAN

Office Manager: W. R. GORDON

Federated Co-operatives Limited, on behalf of its members, owns and operates the following Production and Distributive enterprises:

PRODUCTIVE ENTERPRISES

REGINA—Refinery; CANOE and CHASE, B.C.—Lumber Mills;

DRUMHELLER—Coal Mine

PROBISHER, HIRSCH, ALIDA, KINGSFORD, LAMPMAN, NORTH PORTAL, GOODWATER, SMILEY, KINDERSLEY, GULL LAKE—Oil Wells

SASKATOON, WINNIPEG—Feed Processing and Pelleting Plants

DISTRIBUTIVE ENTERPRISES

SASKATOON Warehouses (Lumber, Groceries, Hardware, Feed)

REGINA Warehouses (Petroleum, Groceries, Hardware, Lumber, Feed)

WINNIPEG Warehouses (Groceries, Hardware, Lumber, Feed, Dry Goods)

TISDALE Branch Warehouse (Bulk Commodities)

YORKTON Branch Warehouse (Bulk Commodities)

SWIFT CURRENT Branch Warehouse (Bulk Commodities)



1. Tank truck loading facilities.
2. Lube Oil and Grease warehouse.
3. Railway siding, tank car loading.
4. Storage tanks for products released for sale.
5. Gas concentration and Poly plant—recovers butane, propane, and high octane gasoline from gaseous vapors.
6. Catalytic Cracking Plant, added in 1954—converts distillates to gasolines.
7. Vacuum Unit—recovers feed stock for the Catalytic Cracking Plant (6) from crude oil residue.
8. Coke Manufacturing Unit—converts final residue of crude oil into petroleum coke.
9. Crude Oil Units—recover straight-run gasoline, heater oil, distillate, diesel, and kerosene from crude oil. This is the first and most basic phase of refining.
10. Platformer and Unifiner, two new units costing three million dollars are under construction. These units are to improve the quality of straight-run gasoline, heater oil, and diesel fuel.

11. Machine Shop.
12. Administration Building.
13. Treating Plant—for treating of products in order to meet the quality specifications of finished products.
14. Water Cooling Towers and Pumps—Water is used to cool products as they come off the refining processes.
15. Ethyl Plant—for blending tetra-ethyl lead with gasolines to achieve desired octane ratings.
16. High Pressure Storage Tanks—for butane and propane.
17. Flare Stack—to burn off waste petroleum gasses.
18. Steam Generating Plant.
19. Control Room—Refinery is controlled from this center by automatic controls.
20. Electrical power supply transformers. Maximum capacity is equal to 15,000 horsepower.

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CONSUMERS COOPERATIVE REFINERIES
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THIS Booklet was published as a souvenir
of the 25th Anniversary of Consumers'
Co-operative Refineries and the celebration
held at Regina on June 18, 1960.

*It is respectfully dedicated to the Pioneer Co-operators, and
all those men and women who helped to build the Refinery
through their work and patronage. Without their dedicated
service this dynamic story could not have been written.*